





a submodule which controls the estimate of the fundamental frequency to be in the range of .25 to 5 Hertz;

a submodule controlling the analysis window to have a duration in the range of several seconds; and

a submodule performing a pre-processing operation which has the effect of increasing the effective duration of an event.

18. (previously presented) In a system for monitoring biological micro-structure activity which produces detectable signals characterizing events, a sensor capable of receiving the sensible signals and a processor including a module for estimating the fundamental frequency of the occurrence of events from the detectable signals, without first detecting the occurrence of individual events, wherein the processor further comprises a module for producing an analysis window during which events are analyzed, the analysis window spanning more than one event, wherein the processor is constructed to perform a segmented autocorrelation process.

19-23 (canceled)

24. (previously presented) In a system for monitoring biological micro-structure activity which produces detectable signals characterizing events, a sensor capable of receiving the sensible signals and a processor including a module for estimating the fundamental frequency of the occurrence of events from the detectable signals, without first detecting the occurrence of individual events, wherein the module for estimating includes components to perform an autocorrelation operation.

25. (previously presented) In a system for monitoring biological micro-structure activity which produces detectable signals characterizing events, a sensor capable of receiving the sensible signals and a processor including a module for estimating the fundamental frequency of the occurrence of events from the detectable signals, without first detecting the occurrence of individual events, wherein the processor is constructed to perform a segmented autocorrelation process.

